

0977076-03034
105020-3402260

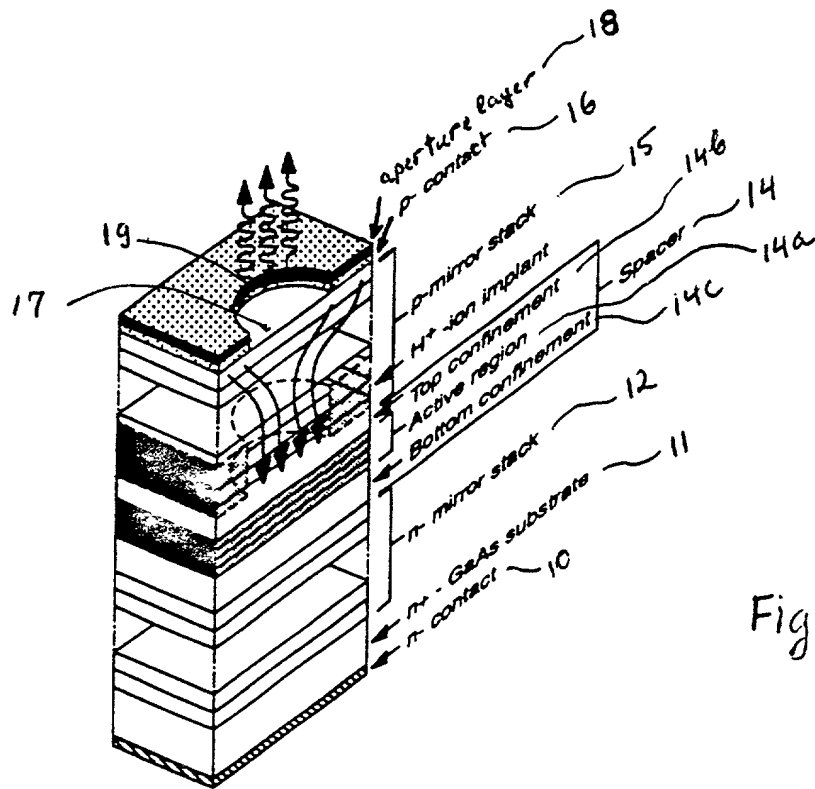


Fig. 1

Schematic vertical cavity top surface emitting laser structure.

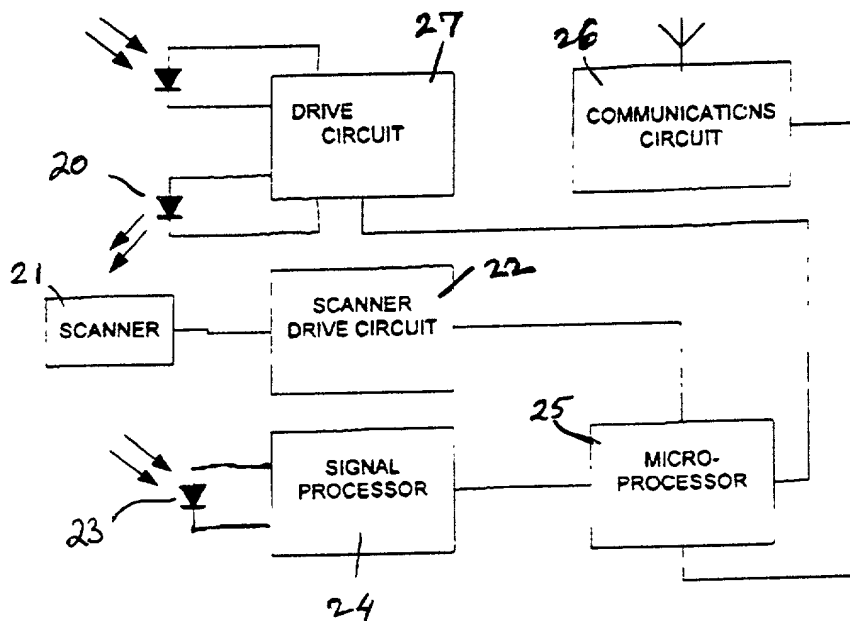


FIG. 2

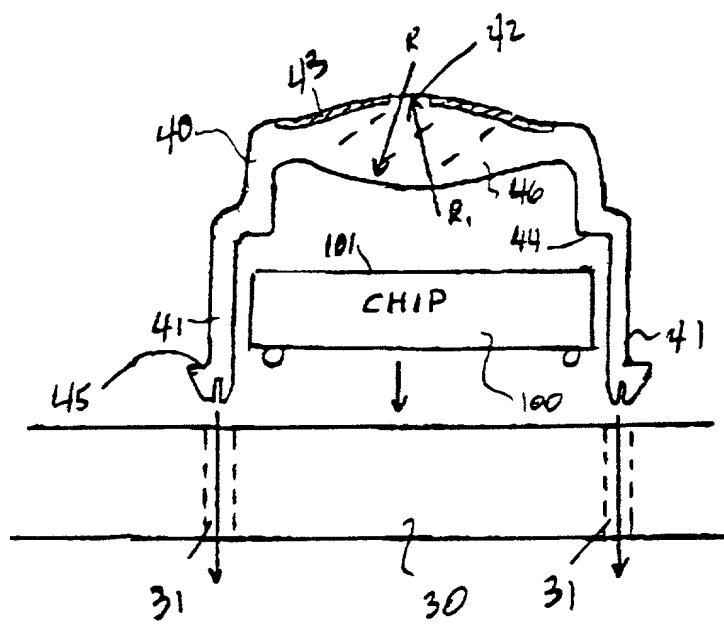
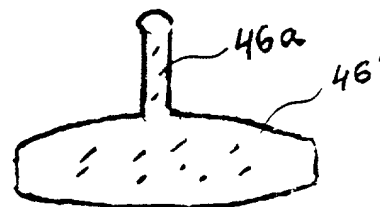
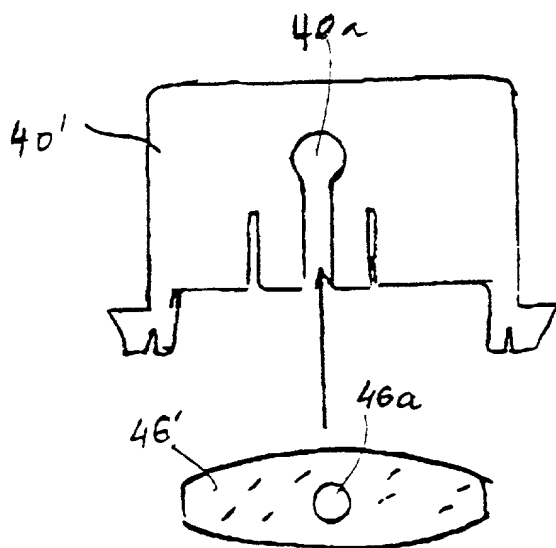
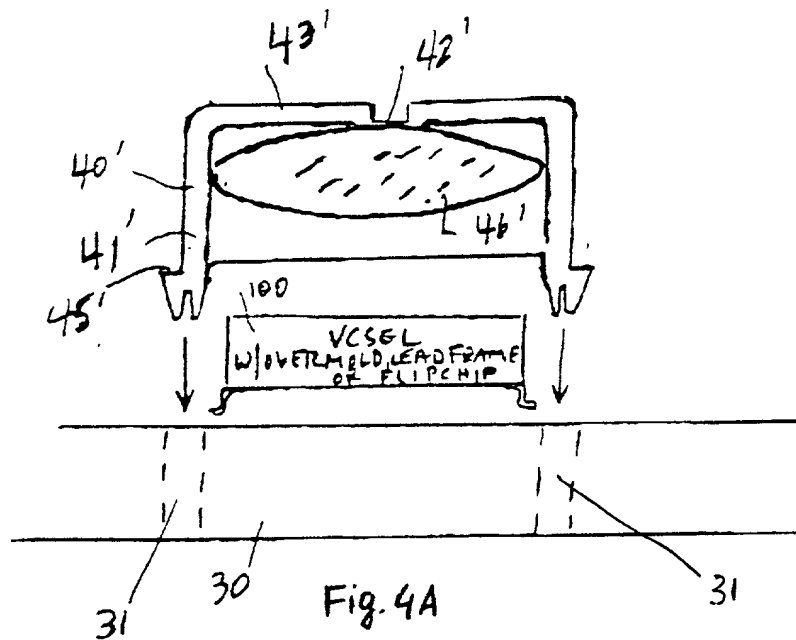


Fig. 3

20250322260



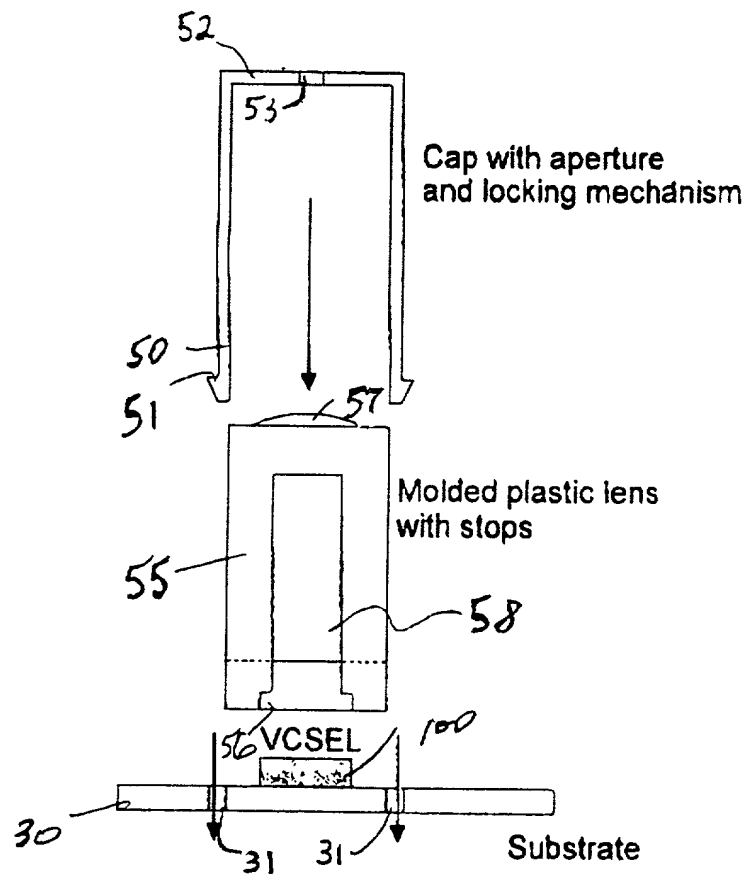


Fig. 5

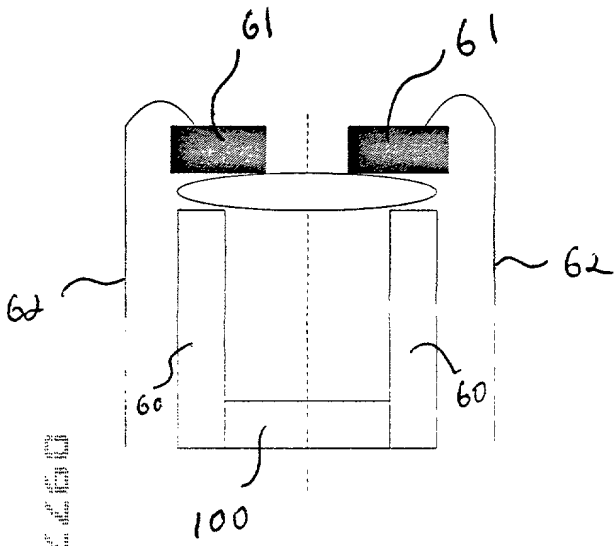


Fig. 6A

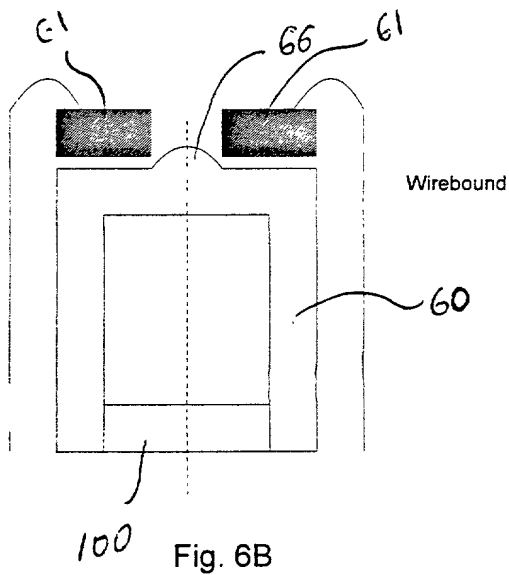


Fig. 6B

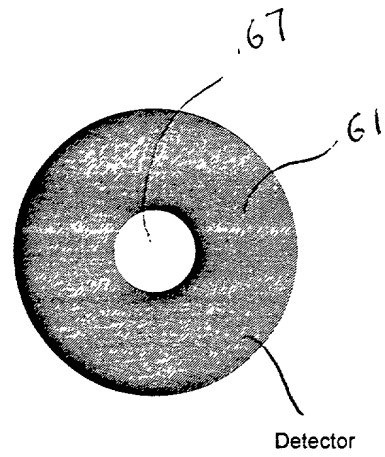


Fig. 6C

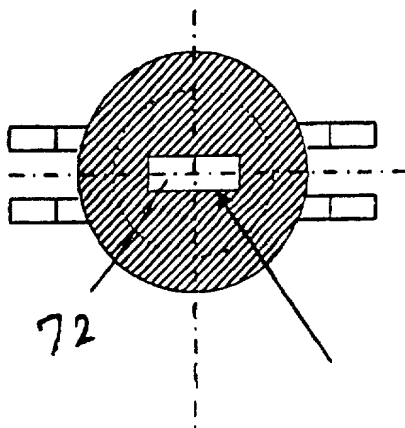


Fig. 7B

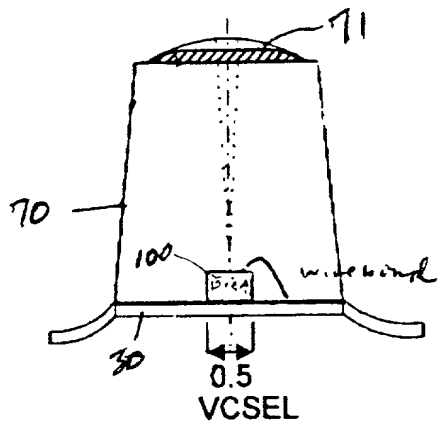


Fig. 7A

Fig. 7

0977076 036504

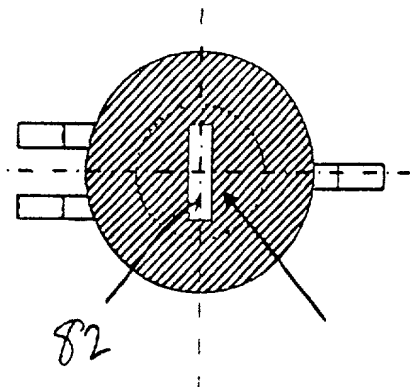


Fig. 8B

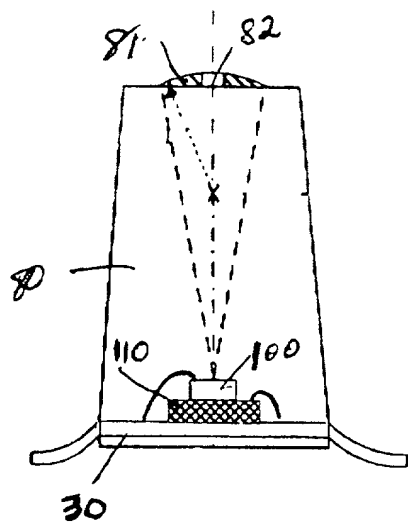


Fig. 8A

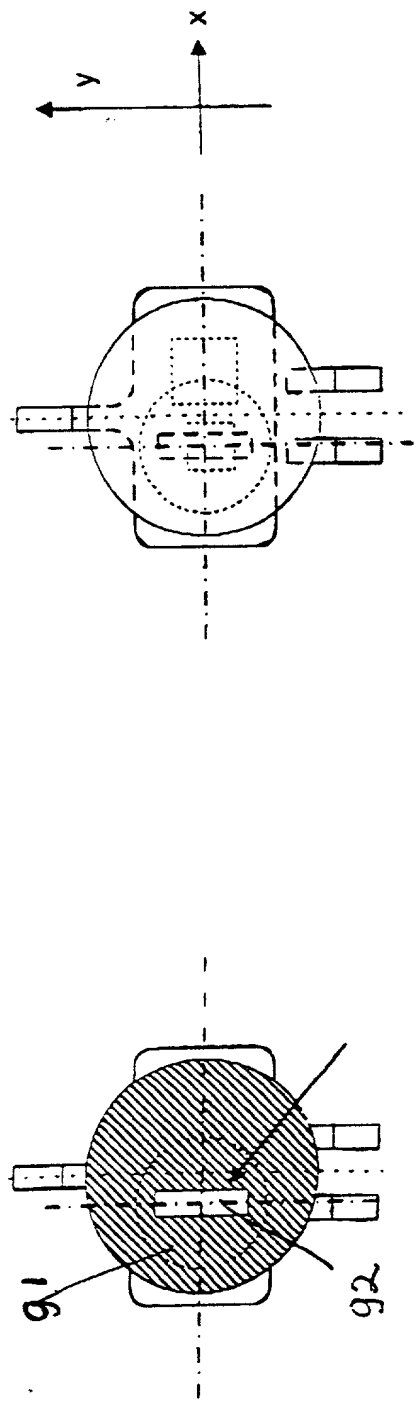


Fig. 9B

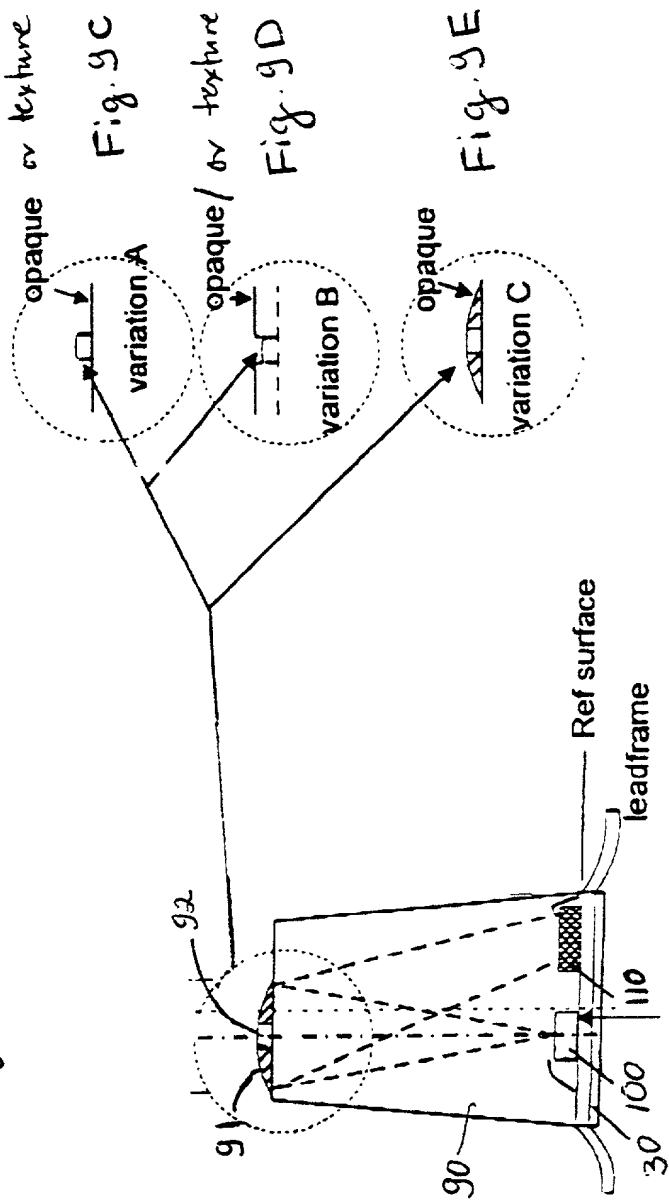


Fig 9A

System integration - flip chip

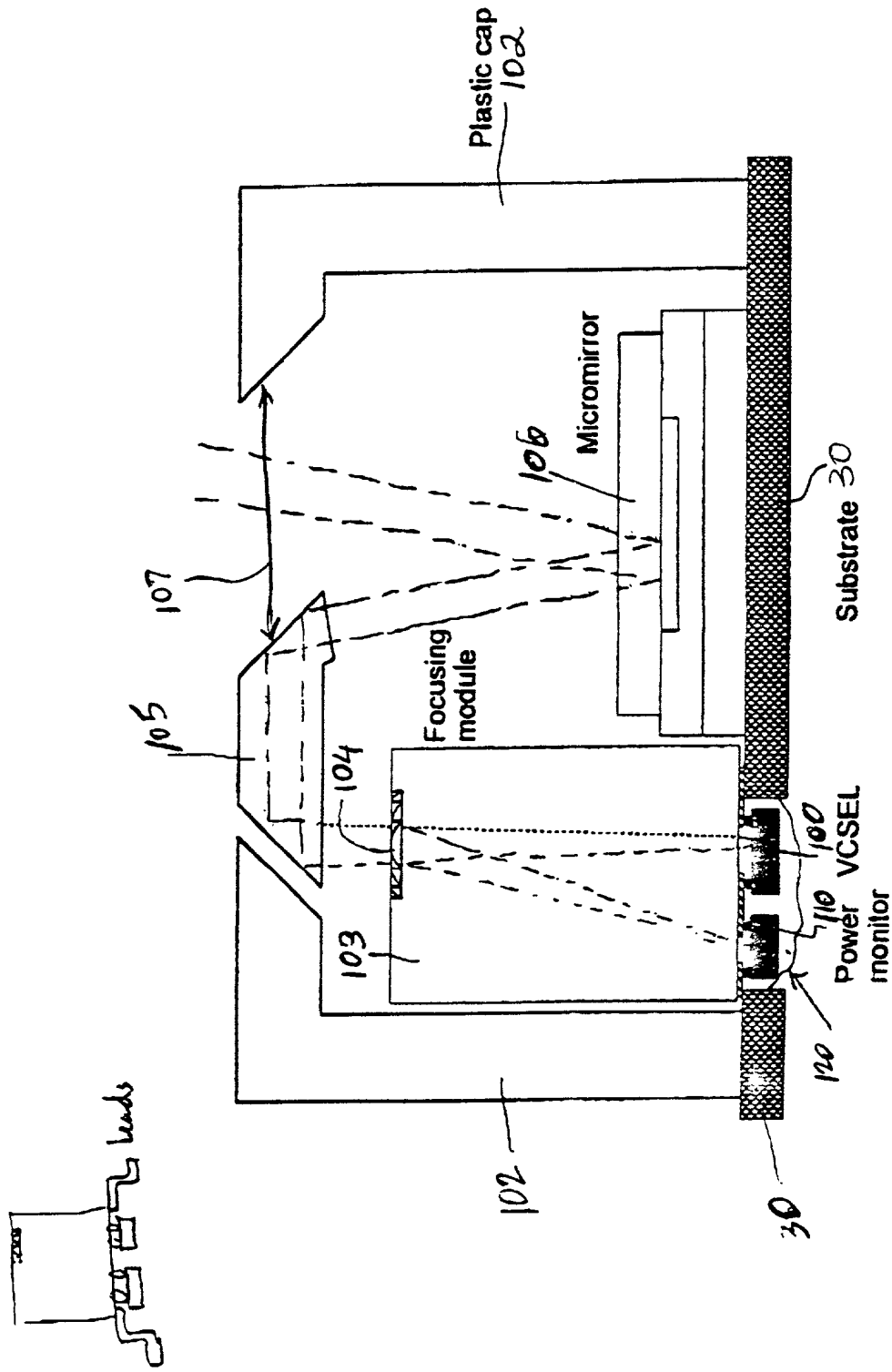
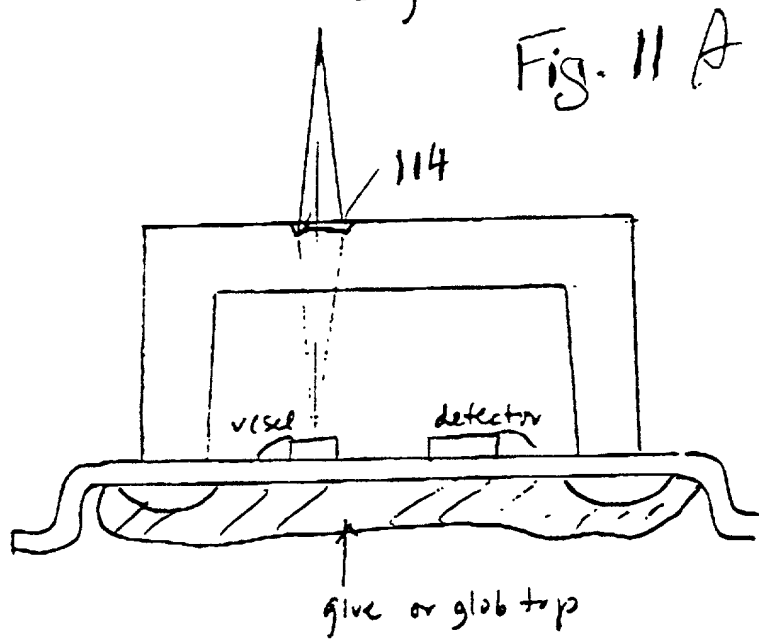
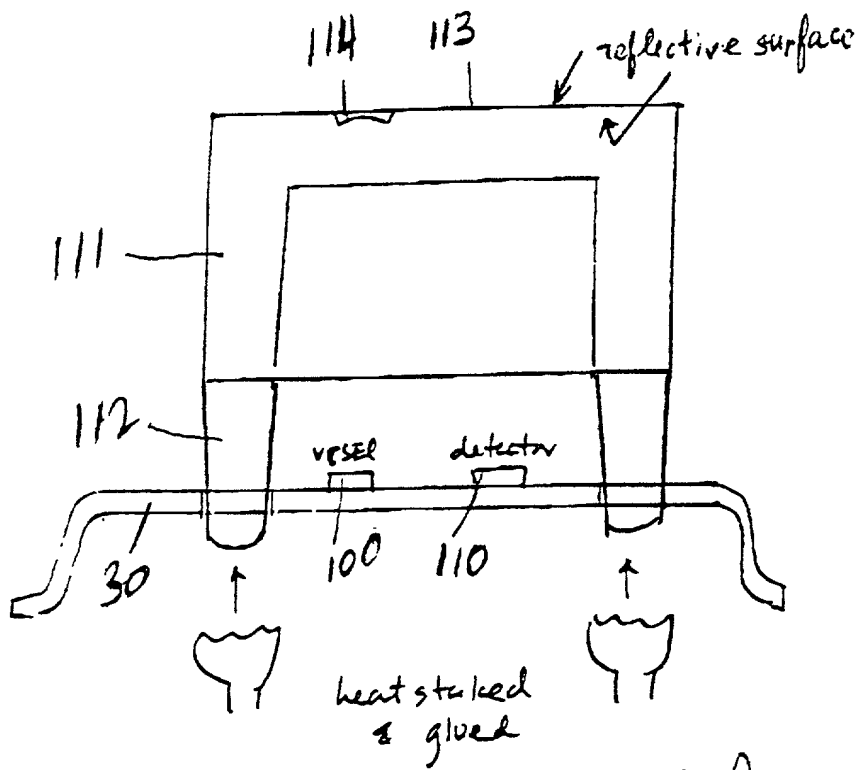


Fig.10



Retro-reflective integrated scanner

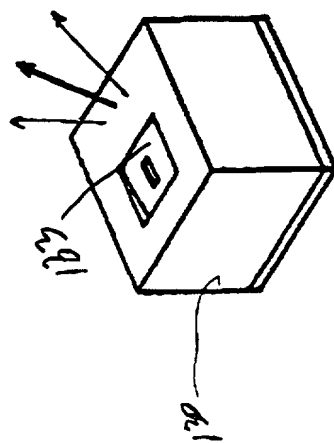


Fig. 13A

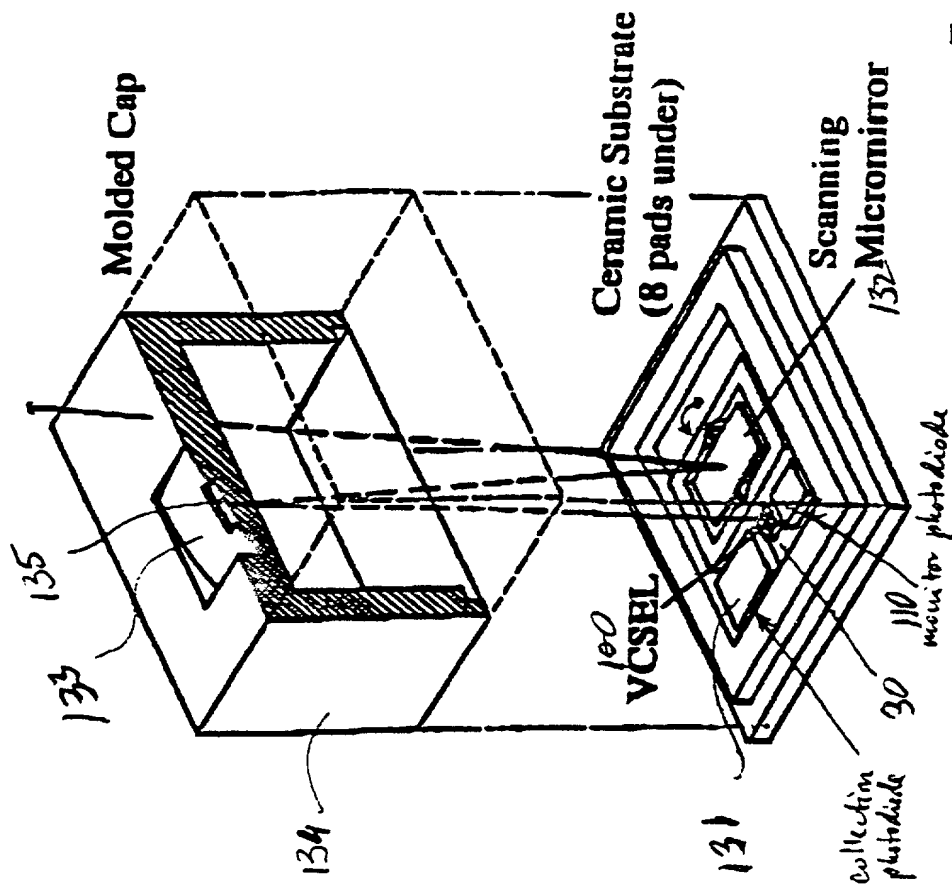


Fig. 13B

Fig. 14C

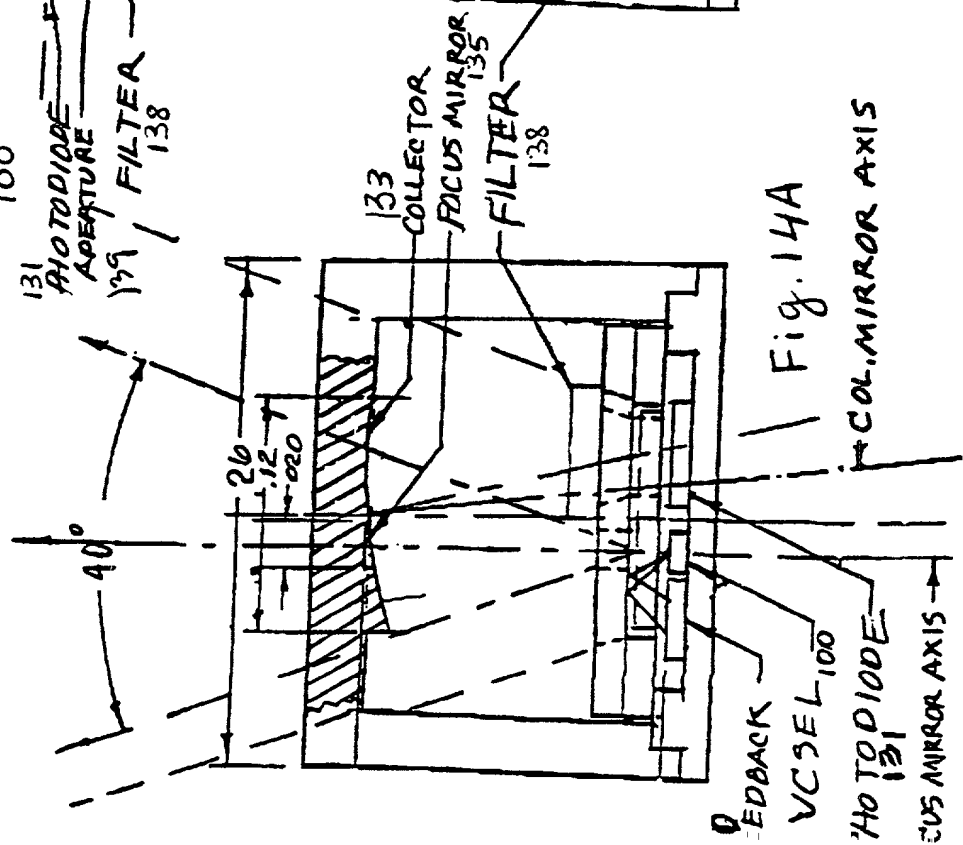
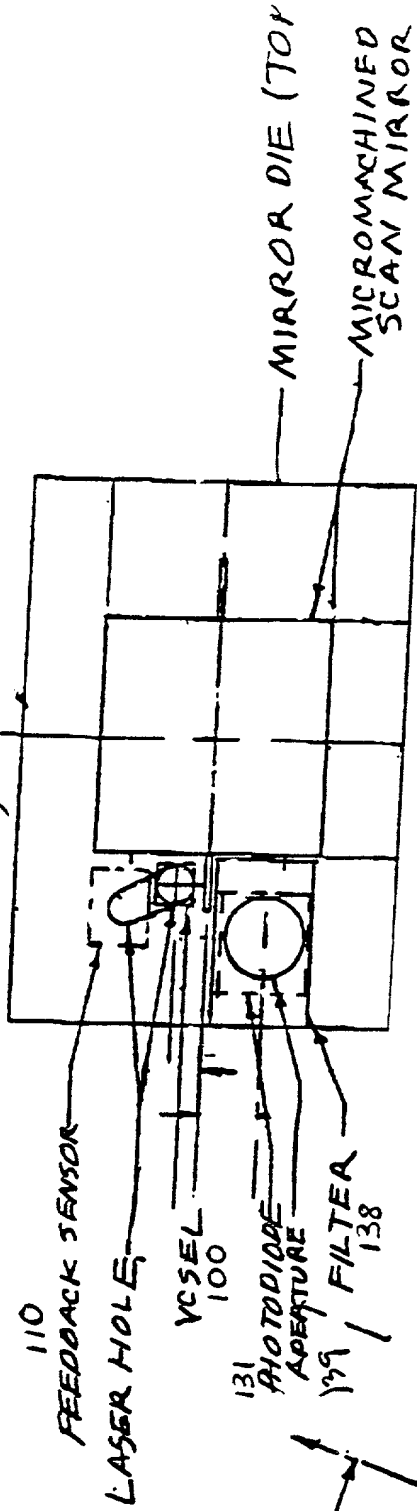


Fig. 14A

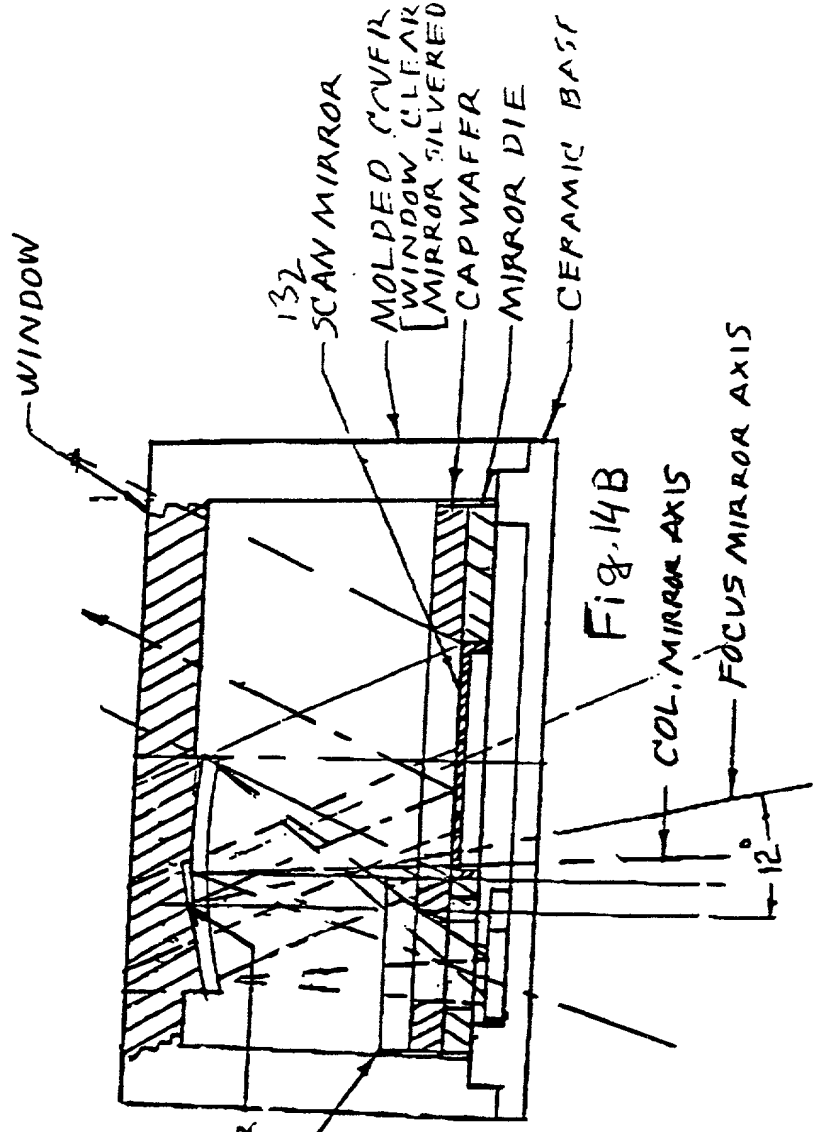


Fig. 14B

Retro-reflective integrated scanner

(Non-smiling arrangement)

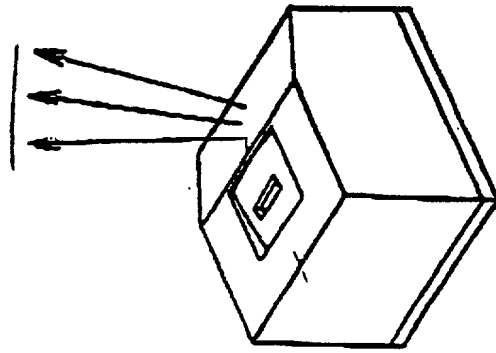


Fig. 15A

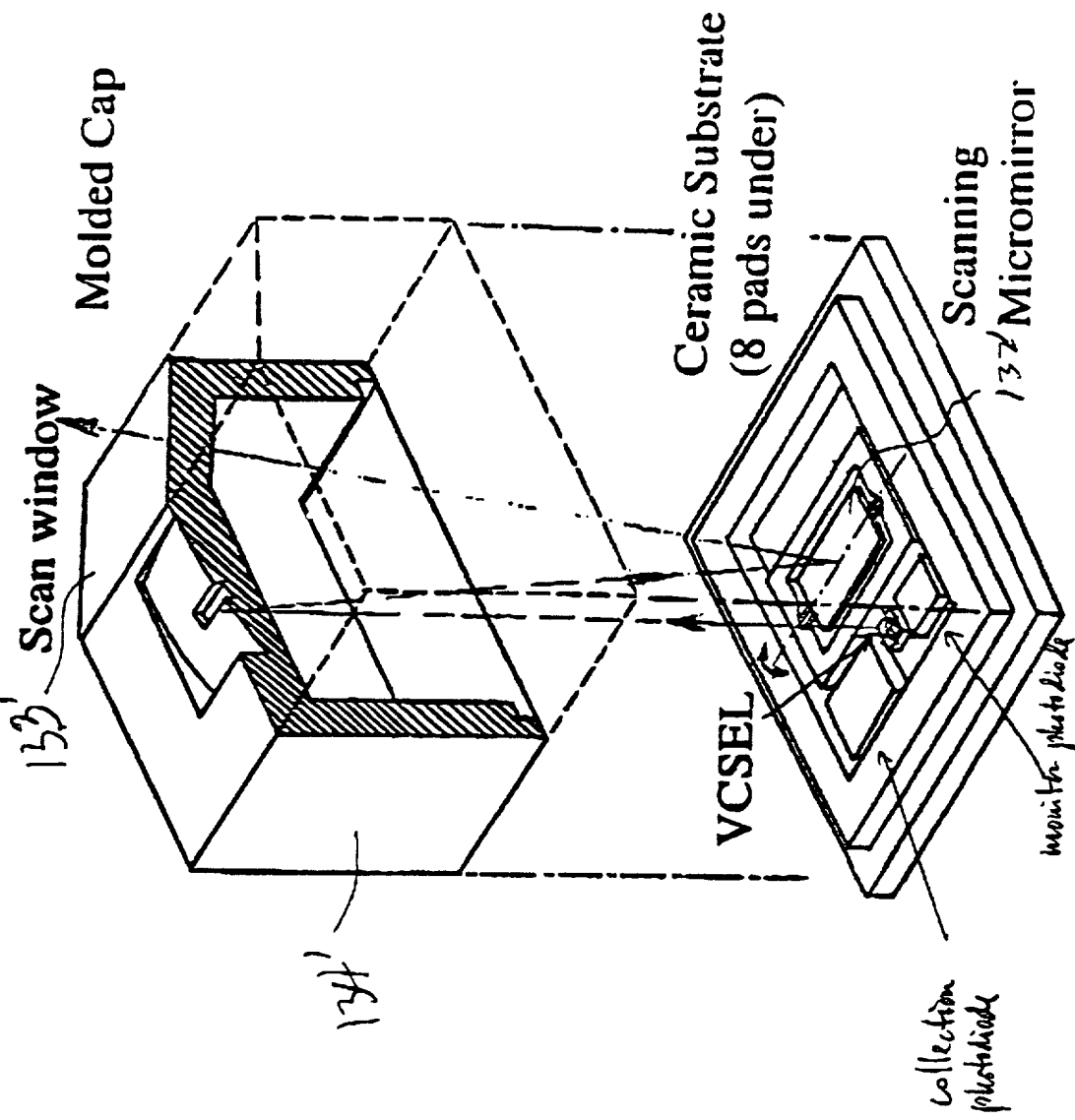


Fig. 15B

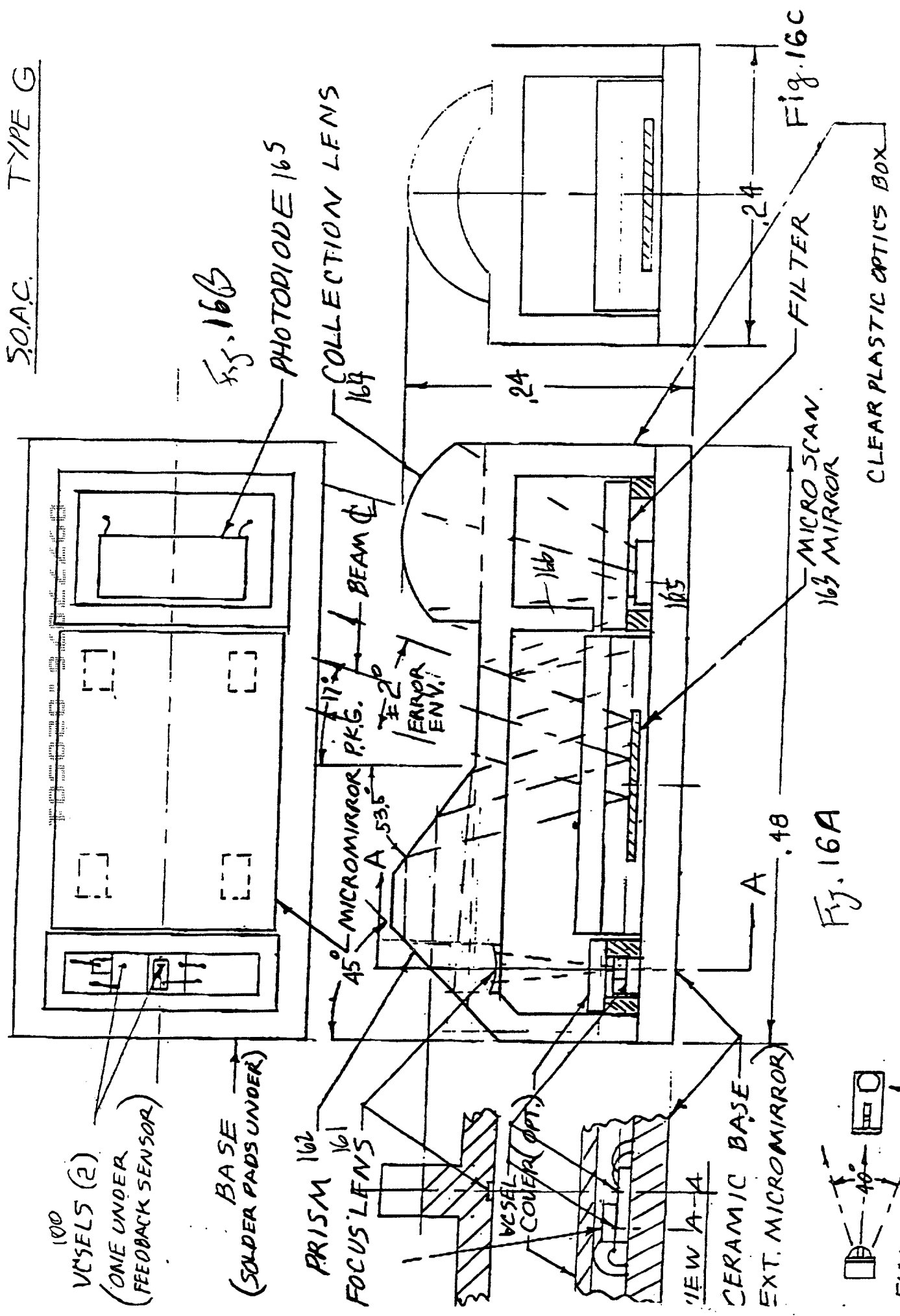
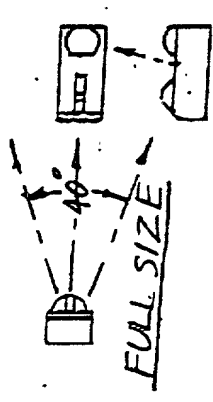


Fig. 16A

Fig. 16C



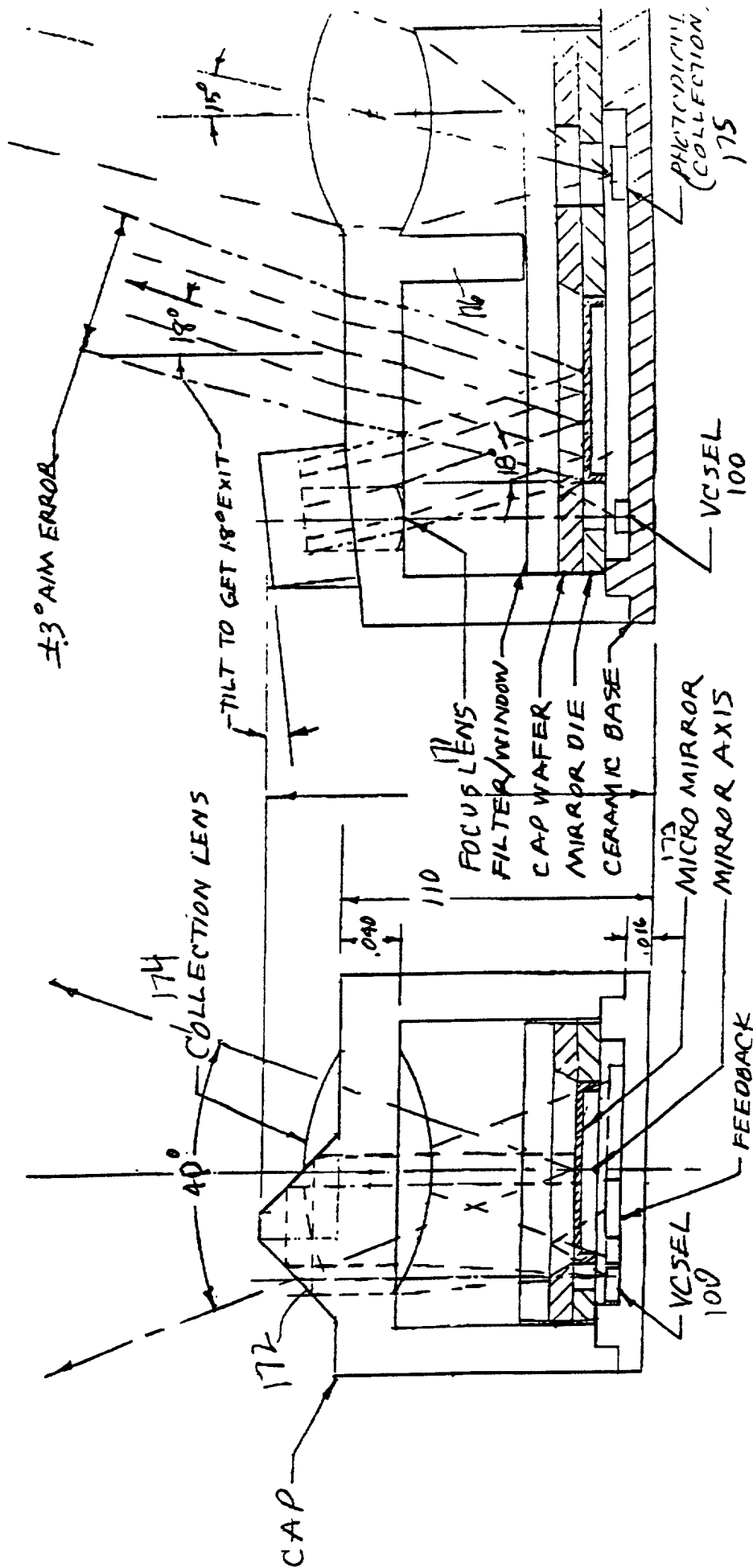


Fig. 17B

Fig. 17A

Other product possibilities - Handspring

SCANNER MODULE FOR HANDSPRING - J. R. DAILEY

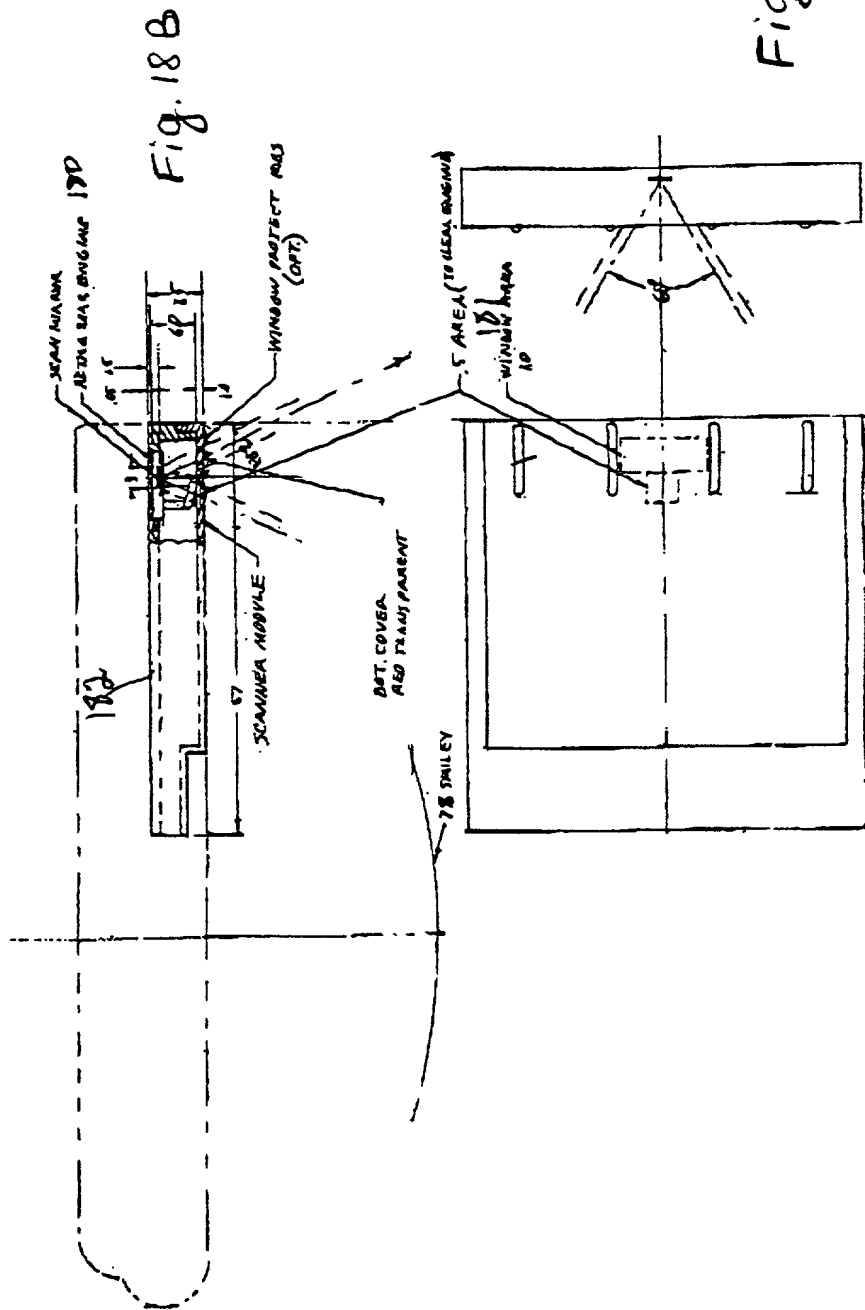


Fig. 18B

Fig. 18A

Fig. 18C

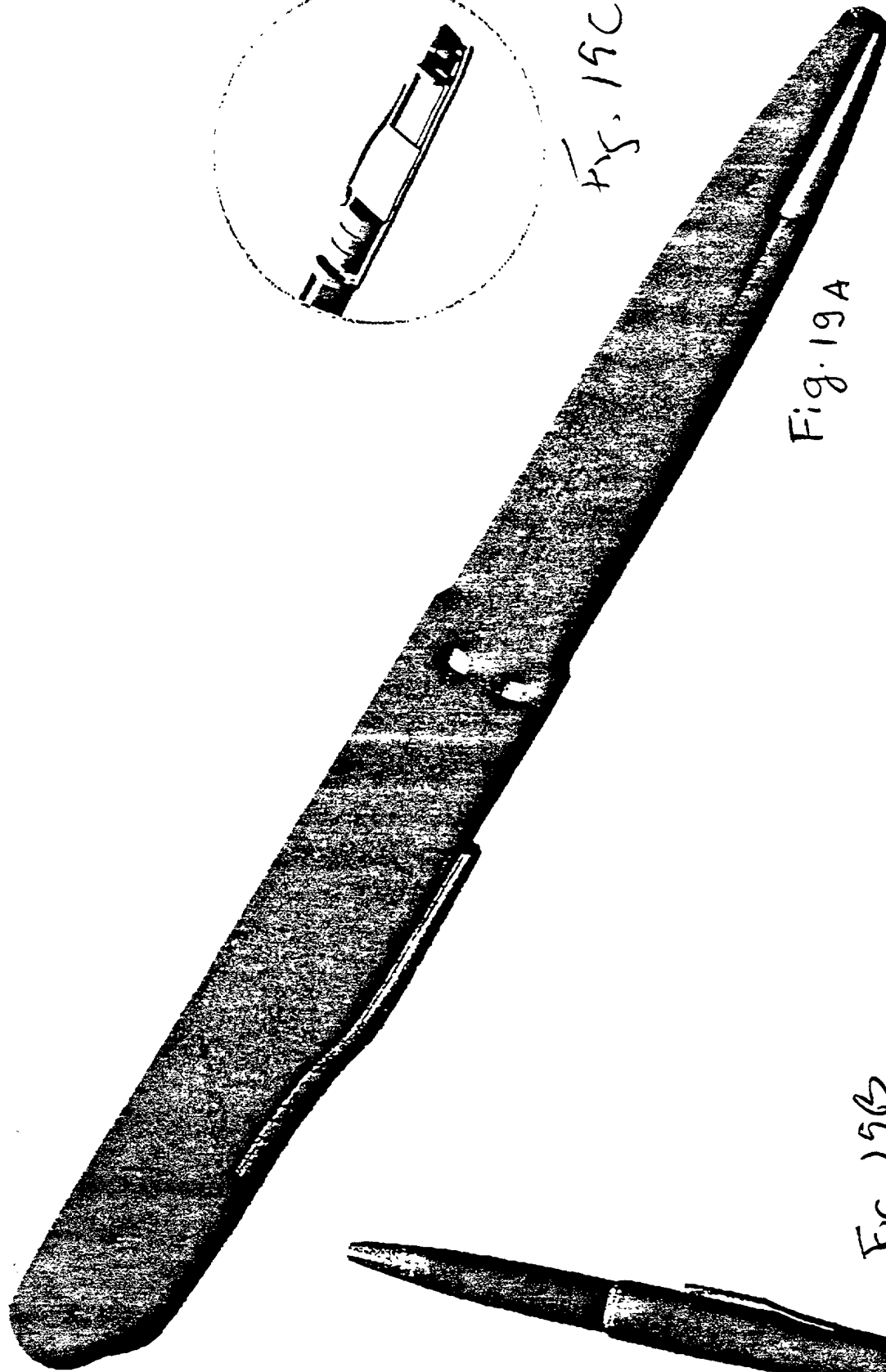


Fig. 19A

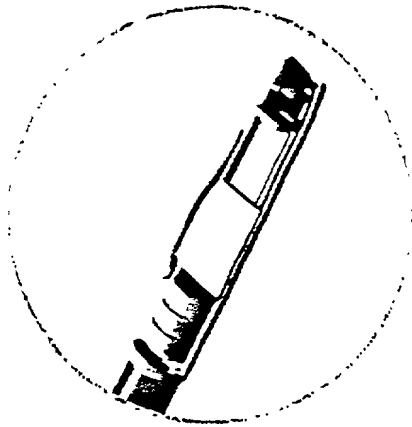


Fig. 19C

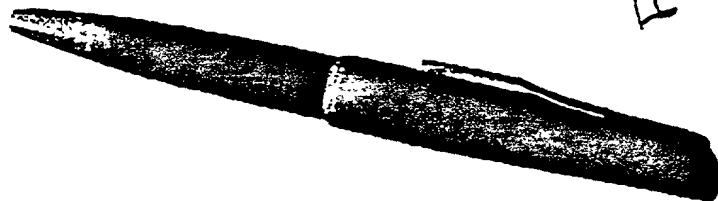


Fig. 19B



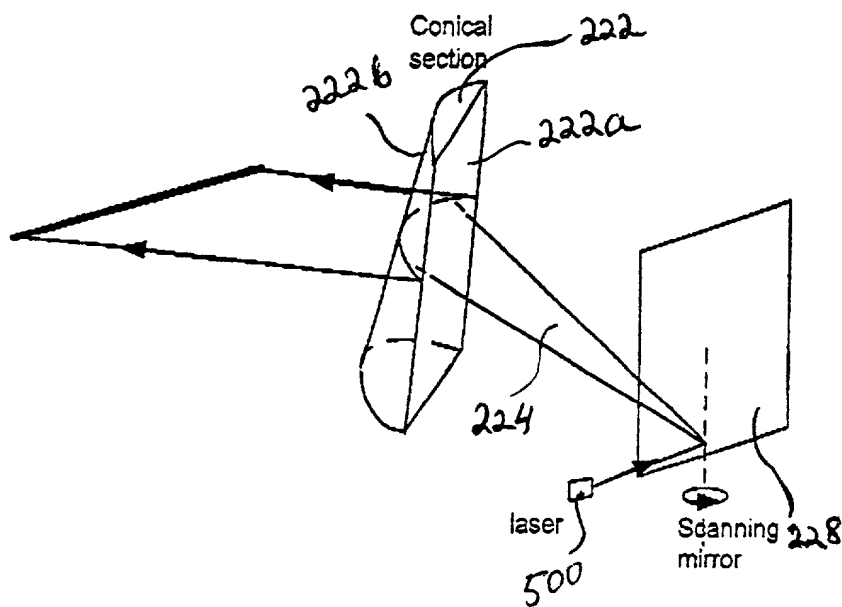


Fig. 22

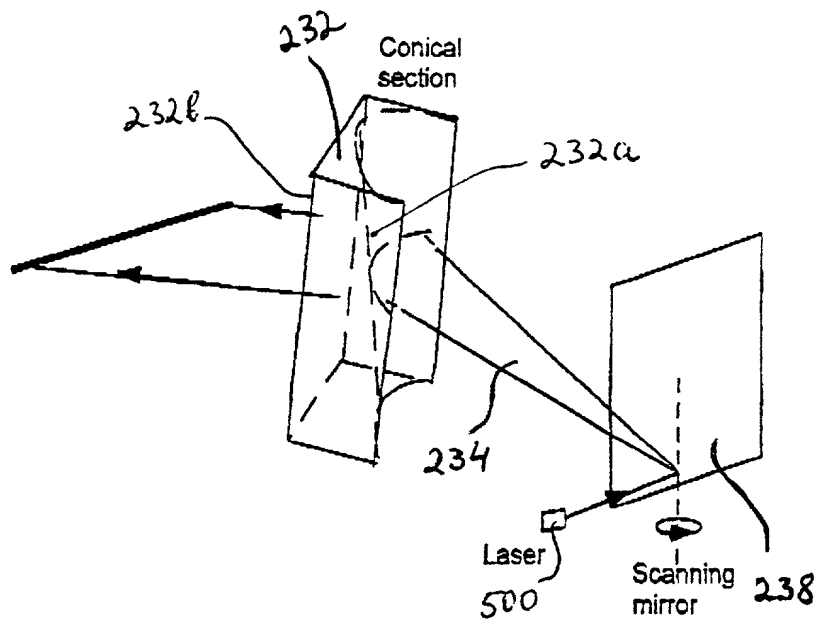


Fig. 23

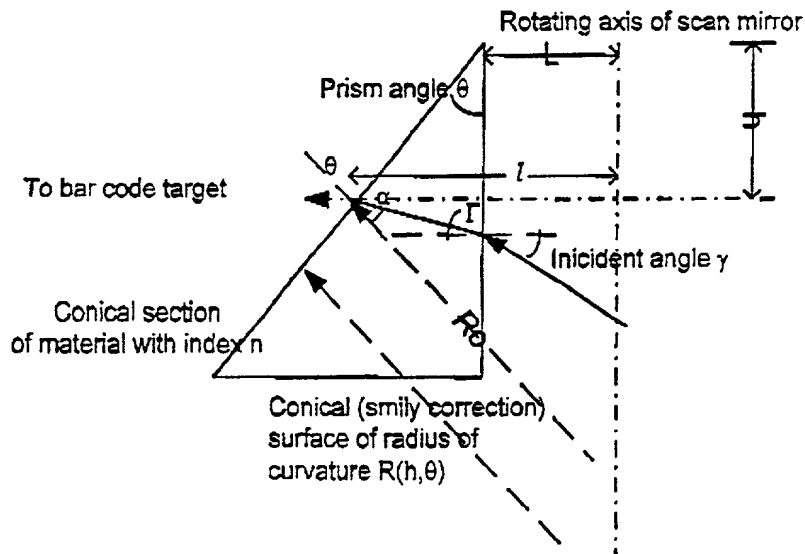


Fig.26

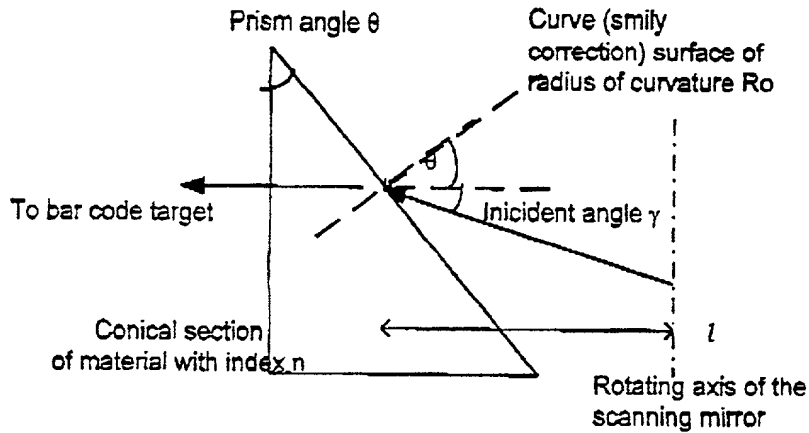


Fig.27

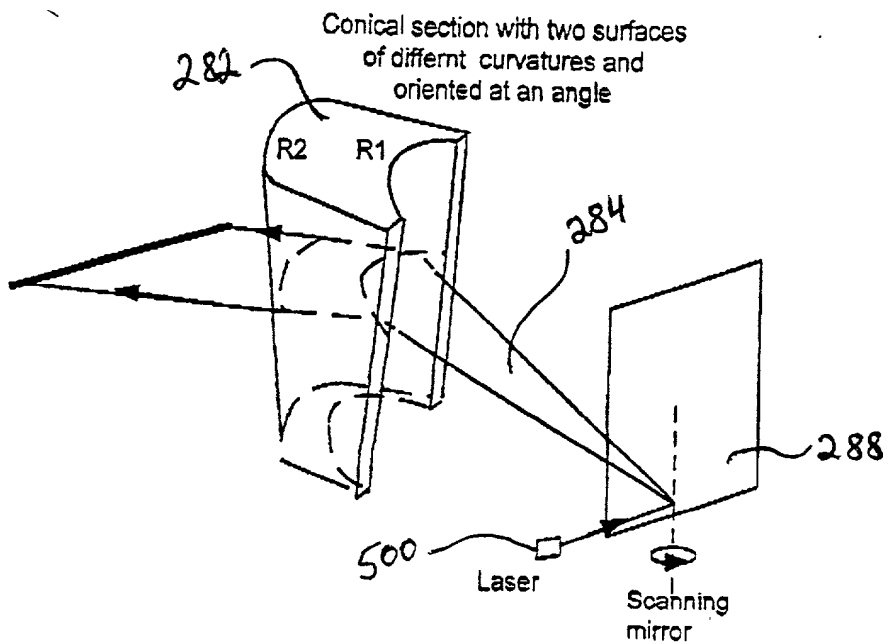


Fig. 28

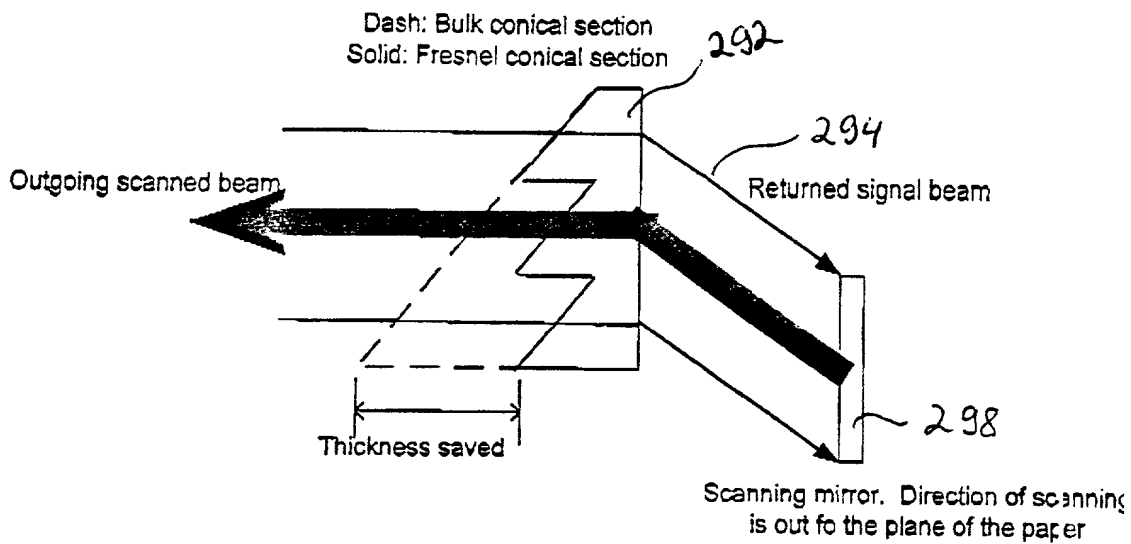


Fig. 29

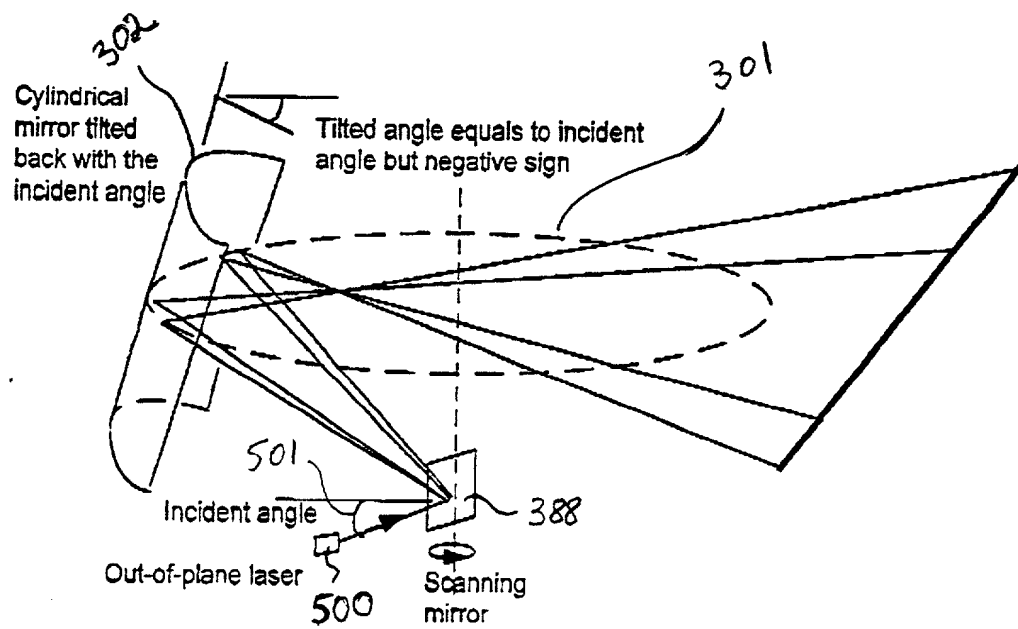


Fig. 30

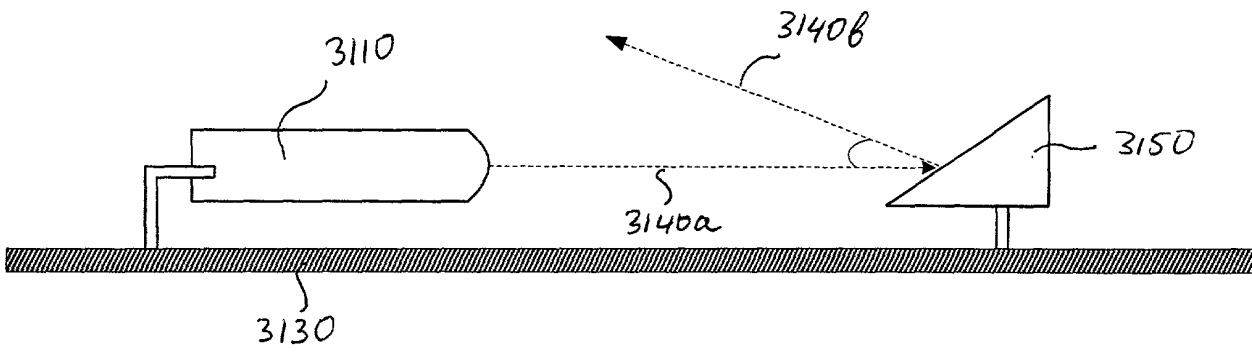


Fig. 31

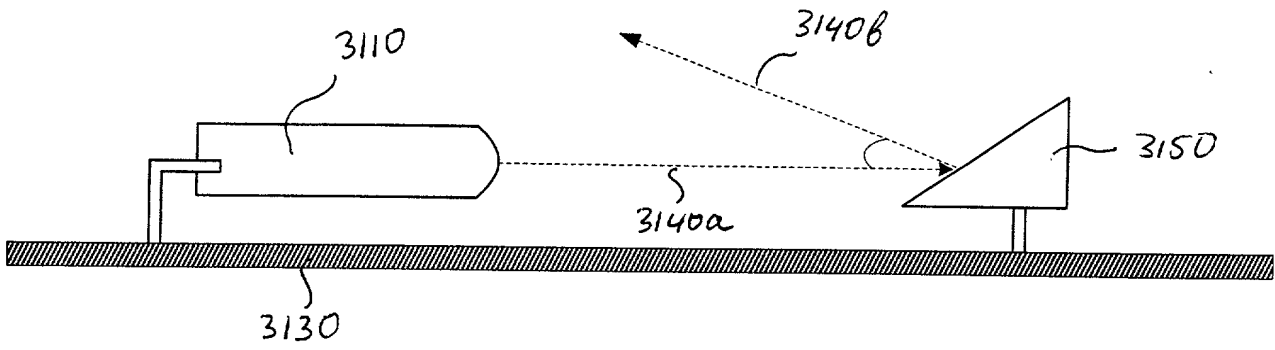


Fig. 31

FIG. 31

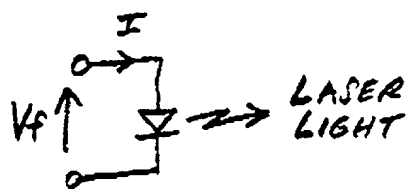


Fig. 32a

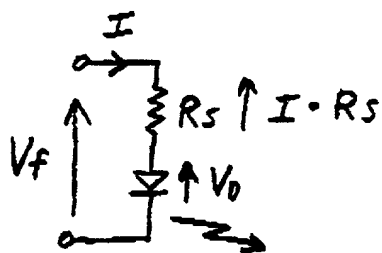


Fig. 32b

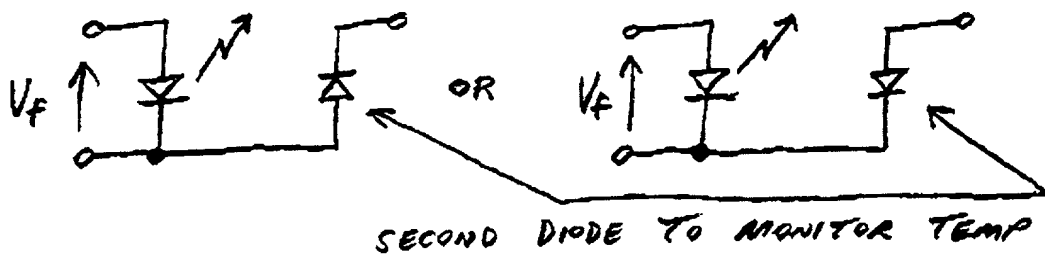


Fig. 32c

Package 4.5 H x 7.5 L x 7.5 W mm, (~3/16x9/32x9/32 in)
(2x1 mm PD, 3 sq mm collection area)

accommodates 6 to 10 deg smiley, 10 deg smiley shown

Placement tolerance: z: +/- 0.025 mm

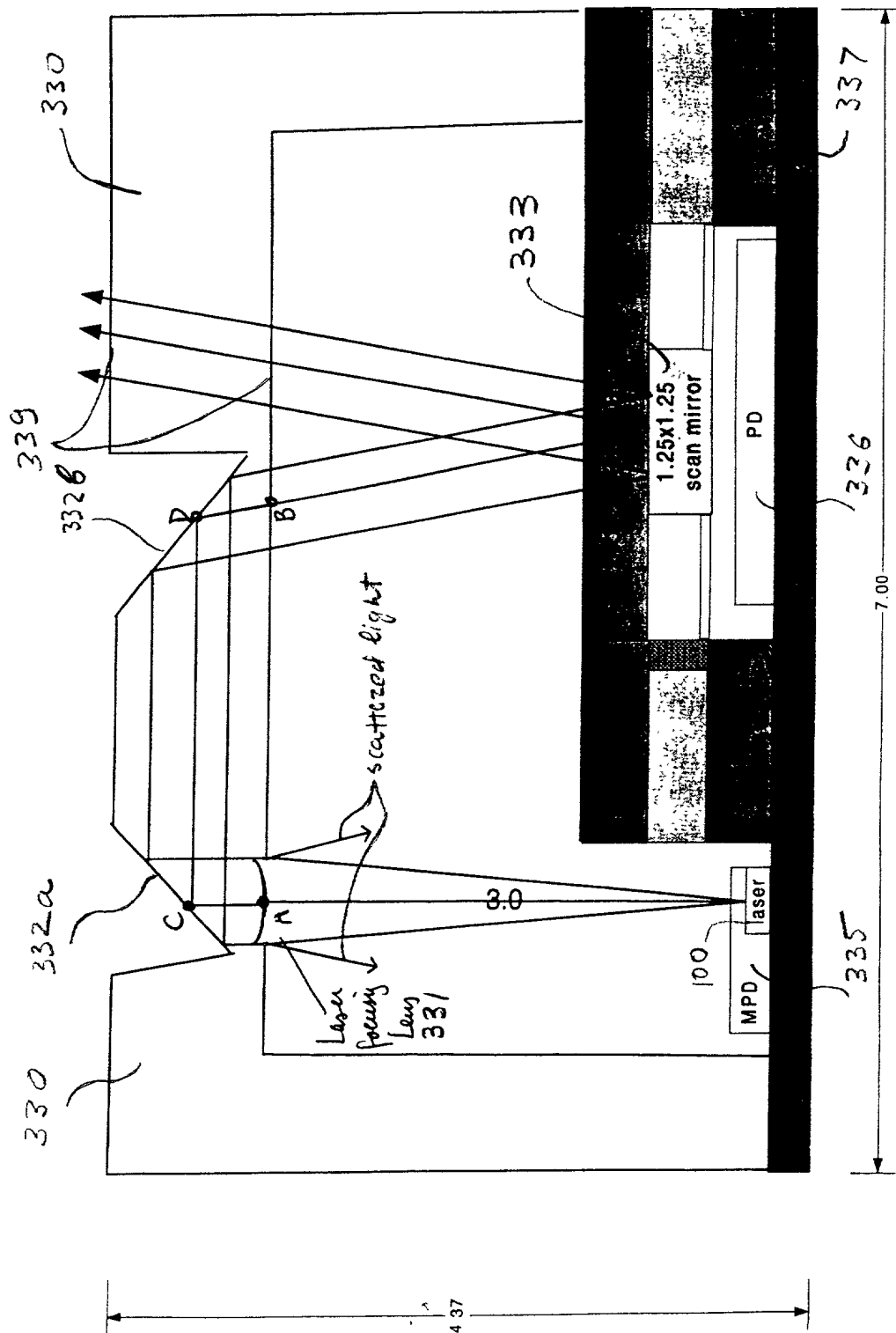
x, y: +/- 0.050 mm

laser pointing error : +/- 4 deg

cap angular error due to placement: ± 0.4 deg

cap prism error: +/- 0.5 deg

Cap feature tolerance: ± 0.025 mm



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FIG. 34
 Package: 3.5 H x 6.5 L x 7 W mm, (~9/64x1/4x9/32 in)
 (0.019" (12mm) collection area)

15 deg smiley shown

Placement tolerance: z: +/- 0.025 mm

x, y: +/- 0.050 mm

laser pointing error: +/- 4 deg

cap angular error due to placement: +/- 0.4 deg

cap prism error: +/- 0.5 deg shown, 0.1 desired

Cap feature tolerance: +/- 0.05 mm

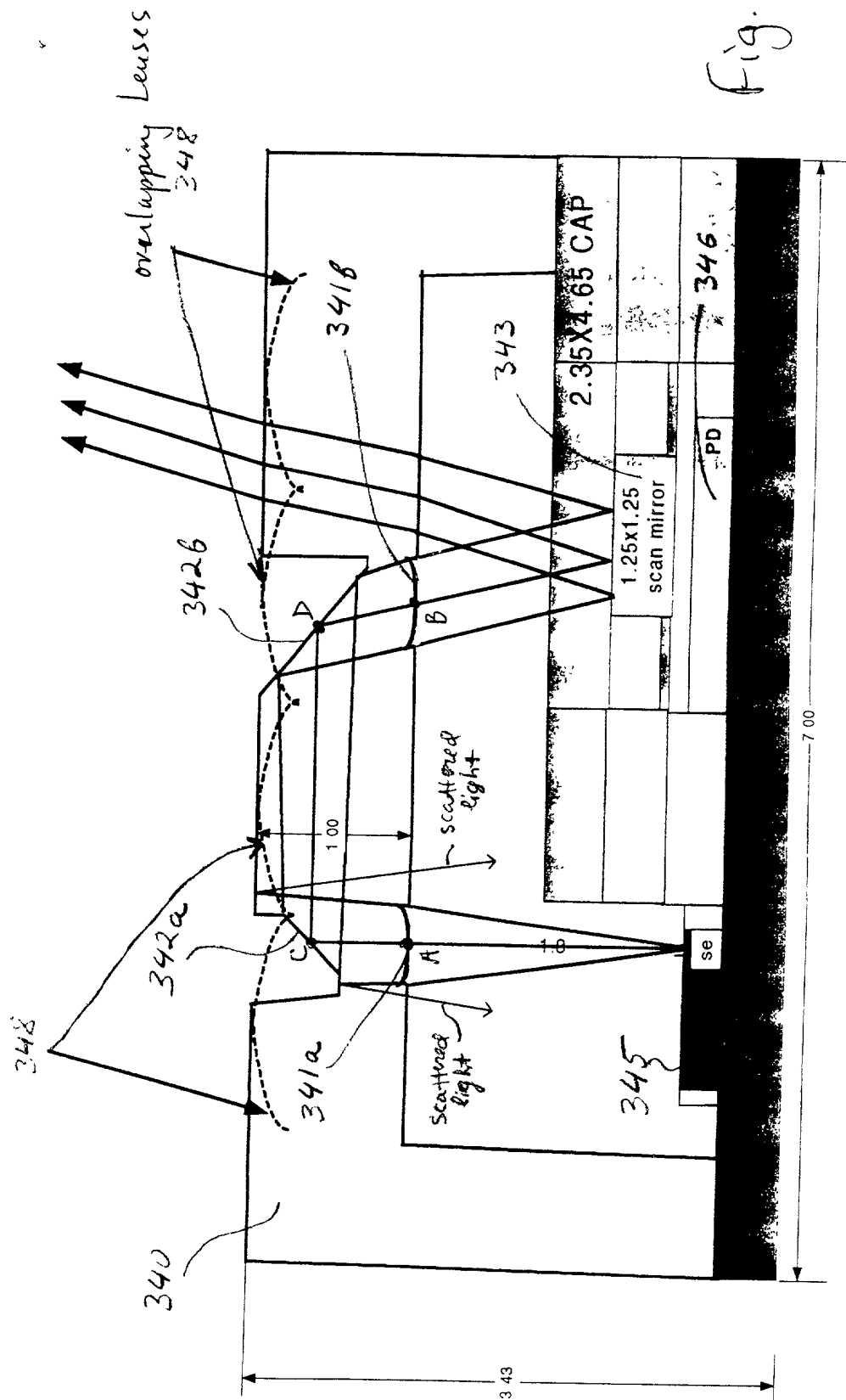


Fig. 34

Package: 4.5 H x 7.5 L x 7.5 W mm, (~3/16x9/32x9/32 in,
 2x4 mm PD, 3 sq mm collection area)

accommodates 6 to 10 deg smiley, 10 deg smiley shown

Placement tolerance: z: +/- 0.025 mm

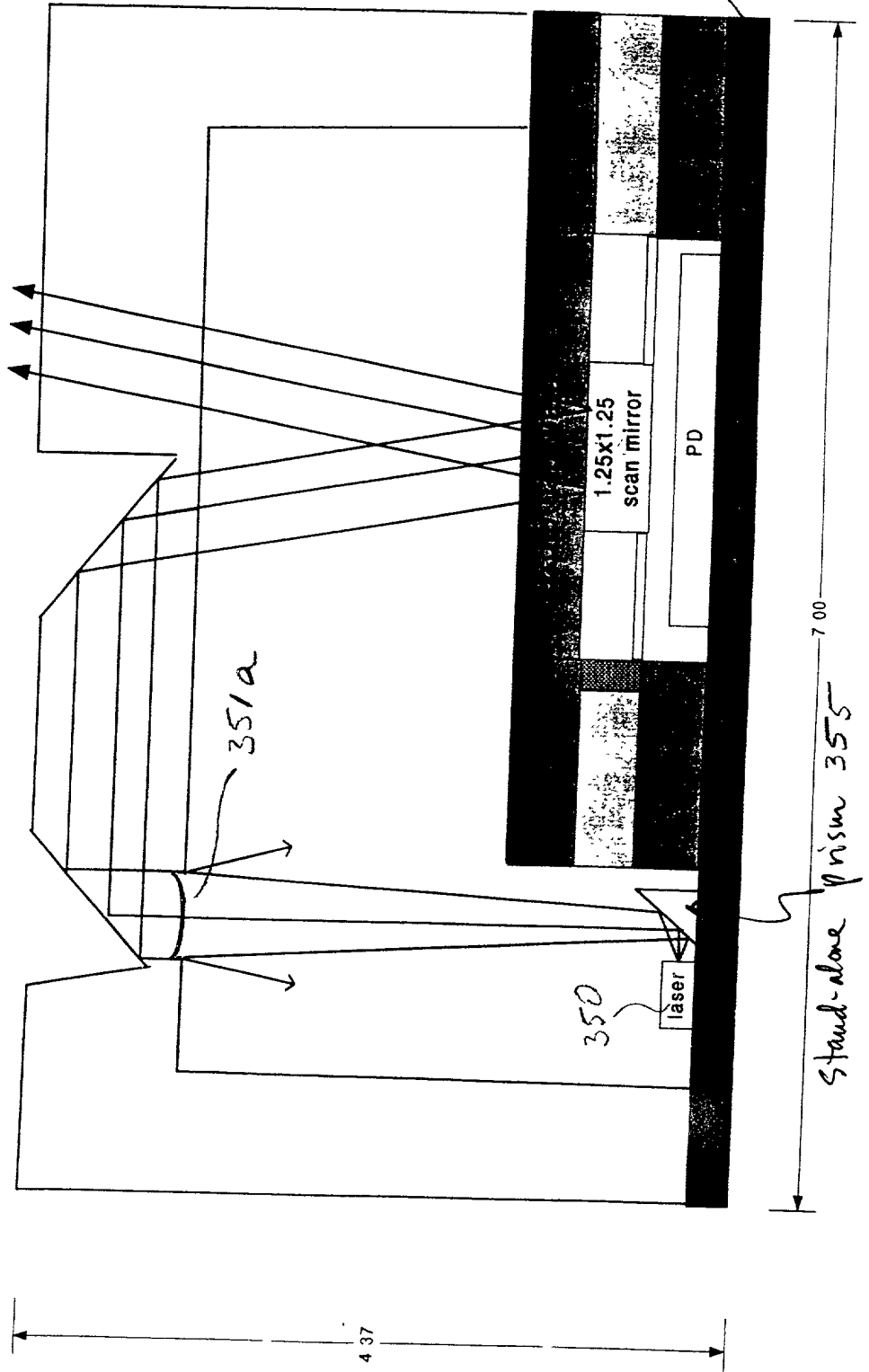
x, y: +/- 0.050 mm

laser pointing error: +/- 4 deg

cap angular error due to placement: +/- 0.4 deg

cap prism error: +/- 0.5 deg

Cap feature tolerance: +/- 0.025 mm



Package: 4.5 H x 7.5 L x 7.5 W mm, (~3/16x9/32x9/32 in)
 (2x1 mm PD, 3 sq mm collection area)

accommodates 6 to 10 deg smiley, 10 deg smiley shown

- Placement tolerance: z: +/- 0.025 mm
- x, y: +/- 0.050 mm
- laser pointing error: +/- 4 deg
- cap angular error due to placement: +/- 0.4 deg
- cap prism error: +/- 0.5 deg
- Cap feature tolerance: +/- 0.025 mm

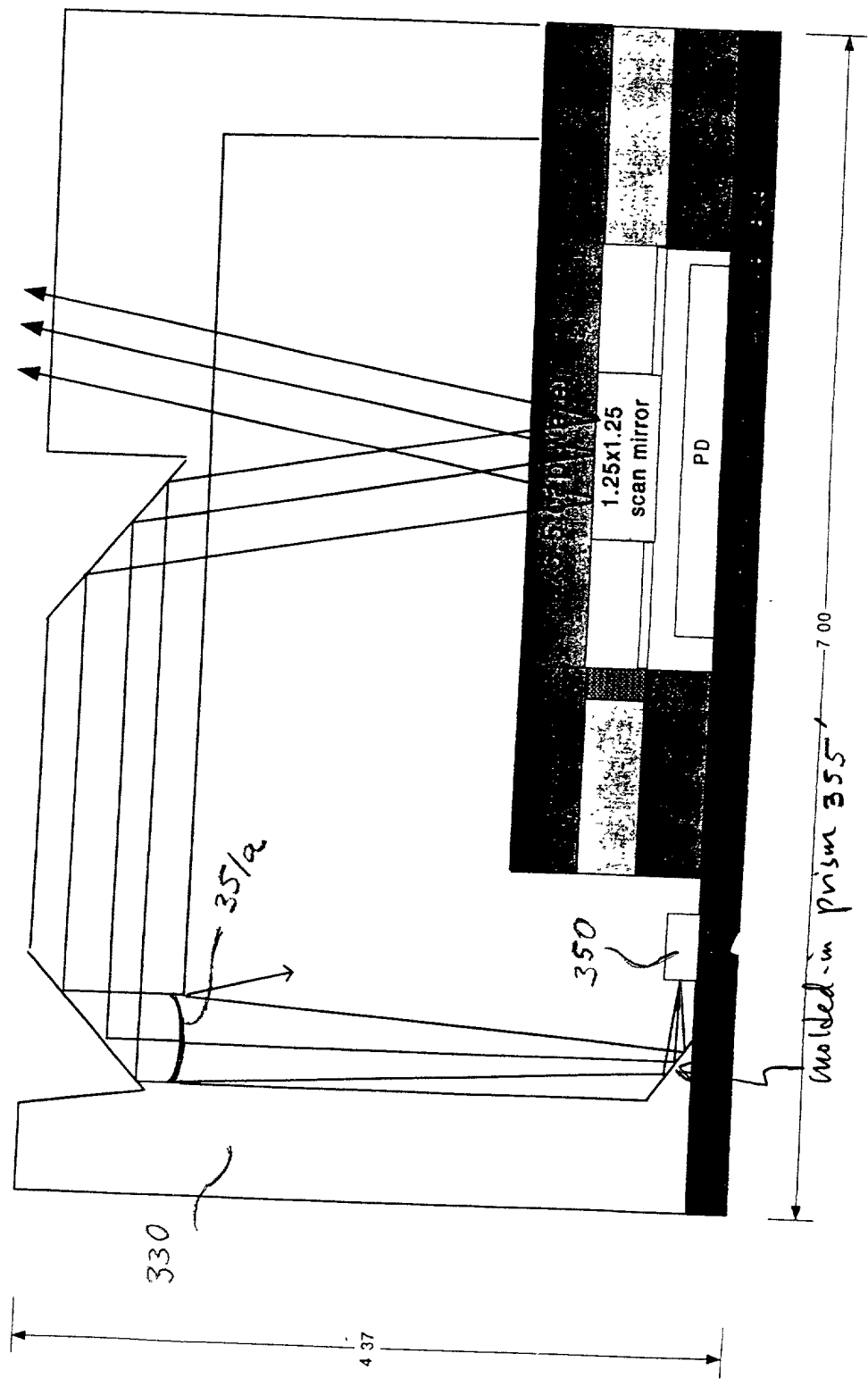


Fig. 358